

ABSTRACT

A power line based communication system includes a powerline termination module, a plurality of powerline gateways, and a plurality of powerline nodes. AC coupling modules couple powerline nodes to medium voltage power lines. One AC coupling module includes a housing having an upper portion that contains a transformer and a lower portion
5 that contains a power node. Another AC coupling module intercouple a powerline node to a test point of a dead front transformer. Still another AC coupling module employs a surge arrestor to couple signals between a powerline node and a medium voltage transmission line. Yet another AC coupling module clamps on a medium voltage power line to couple signals between a powerline node and a medium voltage power line.